AMENDMENTS TO THE CLAIMS/CLAIM LISTING

This listing of claims will replace all prior versions including the listing of claims in the application.

Listing of claims:

1 - 41   (Cancelled)

42. (Currently Amended) A method comprising:

when designing an analog and mixed signal integrated circuit, selecting one of a library of pre-defined transmission line topologies for critical interconnect lines <u>of said integrated circuit</u>.

43. (Currently Amended) An integrated circuit design library comprising:

a set of transmission line topologies for critical interconnect lines <u>of an integrated circuit</u> capable of carrying analog and mixed signals, which topologies comprise return paths therein; and

a set of parametrized, equivalent RLC ladder networks, one per topology.

44. (Currently Amended) The <u>library</u> ~~method~~ according to claim [[42]] <u>43</u> and also comprising means for performing both frequency and time domain analysis for each transmission line placed into an integrated circuit design.

45. (New) The library according to claim 43 and wherein at least an inductance parameter of each said transmission line topology is a function of frequency

46. (New) The method according to claim 42 and wherein at least an inductance parameter of each transmission line topology is a function of frequency.

47. (New) The library according to claim 45 and wherein said frequency ranges from DC to a transistor cut-off frequency.

48. (New) The method according to claim 46 and wherein said frequency ranges from DC to a transistor cut-off frequency.